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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,074

03/25/2004

John F. Remark

2002-10

7645

7590  
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09/27/2010

EXAMINER

GREENIA, SETH GORDON

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

09/27/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/809,074	<b>Applicant(s)</b> REMARK ET AL.	
	<b>Examiner</b> SETH GREENIA	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities: In paragraph [0038] "..inches above then targeted tube.." should read "..inches above the targeted tube..". Additionally, "Depending on the rate at which steam is removes.." should read "Depending on the rate at which steam is removed..". Appropriate correction is required.

### *Claim Objections*

Claim 1 is objected to because of the following informalities: "A method of removing sludge deposits from a stem generator.." should read "A method of removing sludge deposits from a steam generator..". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-4** are rejected under 35 U.S.C. 102(b) as being anticipated by Baum (US 4632705).

As to claim 1, Baum teaches a process for removing deposits (i.e. sludge) collected in a steam generator, the process comprising the steps of: identifying the location of sludge as being in the steam generator; draining a heated aqueous solution

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into the steam generator to above the sludge deposits; at an elevated temperature, the pressure in the steam generator is reduced (i.e. venting) to induce localized flashing and boiling of the aqueous solution; and draining of the aqueous solution carrying loosened sludge deposits (Col. 5, Lines 56-68; Col. 6, Lines 1-23).

As to claim 2, Baum teaches inducing mechanical and thermal stress in the sludge deposits simply by reducing the pressure on the aqueous solution and thereby causing flashing and boiling of the aqueous solution in the steam generator (Col. 5, Lines 56-65).

As to claim 3, Baum teaches the sludge deposits (51) being on the tubesheet (19) of a steam generator (1) (Fig. 1, 2; Col. 3, Lines 45-51).

As to claim 4, the examiner would like to take official notice, wherein it is well known the art that excessive sludge deposits in a steam generator are known as a 'collar'.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 5-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baum (US 4632705).

As to claim 5, Baum teaches providing an aqueous solution in the steam generator and inducing flashing and boiling of it in order to remove sludge deposits (Col. 5, Lines 56-68; Col. 6, Lines 1-23). Baum fails to specifically teach the level of aqueous solution being a level between 0 and 24 inches above the sludge. However providing liquid at a level between 0 and 24 inches above the sludge deposit is deemed a matter of design choice, wherein it would have been obvious to one of ordinary skill in the art at the time of invention to provide the aqueous solution at a level above the sludge deposits, yielding the predictable results of inducing mechanical and thermal stresses on the sludge to remove it.

As to claim 6, Baum teaches repeating the aforementioned steps numerous times until sludge deposits are removed; the steps comprising recognizing remaining sludge located in the steam generator; draining a heated aqueous solution into the steam generator to above the sludge deposits; and at an elevated temperature, the pressure in the steam generator is reduced (i.e. venting) to induce localized flashing and boiling of the aqueous solution (Col. 5, Lines 56-68; Col. 6, Lines 1-23). Flashing and boiling of the aqueous liquid in the steam generator will inherently reduce the liquid level towards the sludge deposit.

As to claim 7, Baum teaches building pressure again the in the steam generator and repeating depressurization to induce boiling and flashing; and draining the dislodged sludge deposits (Col. 6, Lines 1-23).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SETH GREENIA whose telephone number is (571)270-5282. The examiner can normally be reached on weekdays from 9a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571)272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SETH GREENIA/  
Examiner, Art Unit 3749

/Steven B. McAllister/

Supervisory Patent Examiner, Art Unit 3749